

ABSTRACT

A protocol associated with an Internet protocol version six (IPv6) network address included within a network packet provides both unicast and anycast addressing, while having
5 the same bit locations and bit functions associated with a top-level aggregation identifier, a next-level aggregation identifier, and a site-level aggregation identifier. A prefix associated with the three most significant bits of the network address identifies the network address as being a unicast address, an anycast address, or both a unicast and an anycast address. The prefix that identifies the network address as being both a unicast and an anycast address allows
10 routers to have smaller routing tables.